

A RECORD OF THE COMMON PLANIGALE AT MYORA SPRINGS: THE FIRST DASYURID FROM NORTH STRADBROKE ISLAND. *Memoirs of the Queensland Museum* 33(1): 54. 1993.- A Common Planigale (*Planigale maculata*) was captured at Myora Springs (153°25'E, 27°29'S), North Stradbroke Island on February 11, 1993. The animal was trapped during a survey by Griffith University staff and third-year students, conducted as part of a 'field ecology' course. The trapping effort at Myora Springs consisted of four pitfall traps (20 litre buckets c.38cm deep and 30cm diameter), each situated half-way along a 20m drift fence, as well as 40 small Elliott traps, all of which were set over four nights during February 9-12, 1993. The planigale was caught in one of the pitfall traps.

The Myora Springs region lies on the western edge of North Stradbroke Island, where Capembah Creek drains into the ocean. In this area there is a complex mixture of plant communities, including rainforest, *Melaleuca quinquenervia* forest and woodland, sedgeland, eucalypt forest and woodland, and disturbed areas. The habitat in which the traps were set was mapped by Couits (1992) as partly disturbed closed forest, incorporating patches of simple notophyll vine forest dominated in part by *Melicope elleryana* with *Eucalyptus robusta* emergents and in part by *Callitris columellaris* with *Eucalyptus* spp. emergents; grading on its southern side into an open forest dominated by *Melaleuca quinquenervia* with *Eucalyptus robusta* emergents, and on the eastern side into open forest dominated by *E. pilularis*. The area of closed forest is not much more than one hectare, but is the only area of notophyll vine forest on North Stradbroke Island (Kikkawa, 1975).

The trapped specimen was a young male (testes clearly visible although not very large), of weight 6.0g, head and body length 59mm and tail length 48mm. After being caught it was retained in captivity for three days, during which period it was taken to the Queensland Museum where its identity was confirmed (S. Van Dyck) and it was photographed. It was then released on Stradbroke Island at the point of capture.

This specimen is significant because it is the first record of the family Dasyuridae from North Stradbroke Island. Three dasyurids (*Antechinus flavipes*, *Sminthopsis murina* and *Planigale maculata*) have been recorded from Fraser Island (Van Dyck, 1991), but none from either North Stradbroke or Moreton Islands, in spite of extensive survey effort on North Stradbroke Island (Martin, 1975; Barry & Campbell, 1977; Van Dyck, 1991). *Planigale maculata* was, however, recorded some time ago (1960) from nearby Russell Island (Van Dyck, 1983).

The present new record may be a consequence of using pitfall traps for sampling. Trapping with baited Elliott traps during the past ten years at Myora Springs during annual Griffith University field excursions (typically with 50-100 traps set over three nights each year) has usually yielded high capture rates of *Melomys* species (*M. burtoni* or *M. cervinipes*), moderate capture rates of *Rattus lutreolus*, and occasional captures of *Isoodon macrourus*. In 1993, *Mus musculus* was also captured in the area for the first time, probably a

consequence of recent residential development nearby. Pitfall traps were set for the first time in 1993, and four pitfalls set over four nights caught one *Planigale maculata* and two juvenile *Melomys* sp.

The absence or relative scarcity of dasyurid marsupials on the large sand islands of Moreton Bay is a puzzling biogeographical pattern (see Barry & Campbell, 1977). The lack of dasyurids from these islands cannot be simply a consequence of lack of appropriate sampling, since *Antechinus* spp., if present, should have been caught using conventional baited traps. The distribution of habitat may also be a contributing factor: Stradbroke and Moreton Islands are dominated by 'dry' sclerophyll and heathland communities on soils very low in nutrients (see for example Clifford & Specht, 1979), whereas Fraser Island supports large areas of the moister forest types. Frequent fires on North Stradbroke Island have probably also influenced the habitat available to dasyurids (Martin, 1975). Further pitfall sampling in other parts of North Stradbroke Island would be required to determine whether *P. maculata* occurs throughout the island, or is localised within particular areas such as Myora Springs.

Acknowledgements

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